

JSC Policy Directive

JPD 1830.4D

EFFECTIVE DATE: April 6, 2006

EXPIRATION DATE: April 6, 2011

RESPONSIBLE OFFICE: SA/Space Life Sciences

SUBJECT: Medical Support Requirements for Human Testing and Training

1. POLICY. It is JSC policy to provide procedural requirements that assure appropriate medical evaluation and medical support for hazardous tests and training activities that require the participation of human subjects.

2. APPLICABILITY.

2.a. This Policy Directive applies to NASA Johnson Space Center facilities, which includes Ellington Field and Sonny Carter Training Facility in Houston, Texas, and White Sands Test Facility in Las Cruces, New Mexico.

2.b. This Policy Directive applies to any JSC organizational element that intends to perform hazardous testing with the use of human subjects, whether at JSC or any other location. This Policy Directive is not limited to known hazardous environments (i.e., those most frequently involved), but also applies to any human test, training, or experimentation where potential harm to test subjects exists.

3. REFERENCES.

3.a. JPR 1700.3, "JSC Safety and Total Health Handbook".

3.b. JPD 8080.4, "Exposure to Reduced Atmospheric Pressure".

3.c. JPD 1830.3, "Limitations Applicable to Personnel Exposed to Diving".

4. DEFINITIONS.

4.a. **Hazardous Testing.** Any test, experiment, or training activity requiring the participation of a human subject, which could cause the injury, or death of the subject.

4.b. **Hazardous Environment.** Areas where human testing or training may be considered to be dangerous to the participating subject. Examples of hazardous environment areas are:

4.b.1. All hypobaric chambers, both at altitude and at sea level, when any oxygen environment is supplied to a suited subject or a subject supported with a breathing mask.

4.b.2. All hyperbaric chambers for treatment or training dives.

4.b.3. All water tests or training activities in weightless environment training facilities or open water areas.

4.b.4. All centrifuge facilities.

4.b.5. All acoustic and vibration facilities.

4.b.6. All acceleration facilities.

4.b.7. All experimental aircraft that may present a hazard to pilots or ground personnel involved in their use.

4.b.8. All impact facilities, including drop towers and drop tests of spacecraft components.

4.b.9. All thermal installations.

4.b.10. All pressure garment assembly work where the suit pressure is 8.0 psid or greater, regardless of altitude where testing takes place.

4.b.11. All egress training facilities.

4.c. **Human Test.** Any test which requires the participation of a human subject.

4.d. **Medical Support.** Protective or monitoring support for human testing which involves a wide range of possible services utilizing personnel and/or equipment.

5. RESPONSIBILITIES/REQUIREMENTS.

- * 5.a. It is the responsibility of all test managers or organizations which require the use of human test subjects to submit a Medical Support Form JSC Form 710 to the Medical Operations Branch, Human Test Support Area/SD2, no later than five (5) days prior to the first Test Readiness Review Board (TRRB) meeting. If no TRRB meeting is required, the Medical Support Form must be submitted no later than two (2) days prior to the first event of the test. In the event unique test requirements are involved, such as those to be conducted for the first
- * time, the JSC Form 710 should reach the Human Test Support Area no later than two (2) days prior to the initial planning meeting. This will allow medical support personnel to participate in the planning and make timely arrangements for the medical support systems that will be required for the test.

5.b. The Medical Operations Branch/SD2, shall review for approval all plans for human testing, determine the medical support required, and shall provide the required medical support at all locations as appropriate.

5.c. Waivers to planned medical support must be approved by the Director, Space Life Sciences, Johnson Space Center.

5.d. All test subjects must have the equivalent of a Class III physical or better (as judged by a NASA medical officer cognizant of human testing hazards) before participating in any activity that could result in morbidity or mortality. This includes personnel not employed by NASA or a NASA contractor; i.e., VIP's, media personnel, military visitors, and others who wish to participate in a hazardous test activity and whose past and current medical history is unknown to responsible NASA medical personnel. This provision may be waived by the Chief, Space Medicine Division, or that official's designee.

6. RESCISSION. JSC Management Instruction 1830.4C, dated March 15, 1994, is rescinded. Changes include very minor word and format changes.

Original signed by:

Michael L. Coats
Director

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Attachment:

* JSC Form 710, Medical Support Request